

Notice of Allowability

Application No.

10/511,197

Examiner

Dirk Wright

Applicant(s)

NAKAJIMA, SHINICHIRO

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 1-9.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date ____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>01182005</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other ____. |

Claims Allowed

Claims 1-9 are allowable over the prior art of record. The claims are allowable because the prior art does not anticipate nor render obvious the claimed invention of: a differential gear apparatus for vehicles comprising an internal gear which is rotatably disposed, a sun gear which is rotatably disposed with an axis thereof aligned with that of said internal gear, and a planetary gear disposed between said internal gear and said sun gear such that said planetary gear can rotate about its own axis and can revolve, wherein said planetary gear is provided with a first and a second gear part which are different in pitch circle diameter, said first gear part is meshed with said internal gear, and said second gear part is meshed with said sun gear.

No particular single feature of the claim renders the claim as a whole patentable. Only the claim taken as a whole combination is deemed new and unobvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Prior Art Discussed

The examiner has considered the references cited by applicant in his Information Disclosure Statement filed January 18, 2005. None of the references show all of the features of the claimed invention, nor do they show that it would have been obvious to one of ordinary skill in this art at the time the invention was made to combine features therefrom to create the claimed invention.

The references cited by the examiner are deemed pertinent to applicant's disclosure. None of the references show all of the features of the claimed invention, nor do they show that it would have been obvious to one of ordinary skill in this art at the time the invention was made to combine features therefrom to create the claimed invention.

In particular, Chambers '651 shows a spur gear differential wherein a compound planet gear 30 has two gear sections 38, one of which engages a ring gear 46 and the other engages a sun gear 60, but does not teach or suggest that the two gear sections 38 could be of different pitch diameter. Since Chambers gives the same reference numeral to both sections of the compound planet gear, he teaches away from creating a compound planet gear with gear sections of different pitch diameter. There appears to be no evidence that it would have been obvious to one of ordinary skill in this art to modify Chambers to have a compound planet gear where the two gear sections have different pitch diameters. Kanazawa '074 shows a spur gear differential 50 wherein a compound planet gear 65 is employed, but does not show a ring gear as required by applicant's claim. Kawamura '185 shows in figure 9 a spur gear differential with compound planet gears 2 having gear portions of different pitch diameter, a sun gear 90 and a ring gear 87, but there is no single planet gear that engages both a ring gear and a sun gear as required by applicant's claim. Instead, each planet gear engages another planet gear.

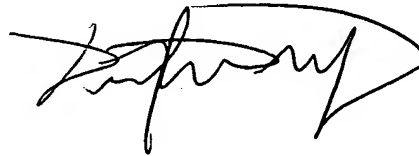
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dirk Wright whose telephone number is 571-272-7098. The examiner can normally be reached on Monday through Friday, 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dirk Wright
Primary Examiner
Art Unit 3681

A handwritten signature in black ink, appearing to read 'Dirk Wright', with a large, sweeping flourish at the end.

DW
Friday, May 12, 2006